# STATE OF MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS FOR THE MINNESOTA ENVIRONMENTAL QUALITY BOARD

In the Matter of the Application by Lakefield Junction LLP to Exempt From the Power Plant Siting Act the Construction of a High Voltage Transmission Line to Interconnect the Lakefield Junction Generating Station to the Lakefield-Wilmarth 345 kV Transmission Line.

FINDINGS OF FACT,
CONCLUSIONS AND
RECOMMENDATION

The above-entitled matter came on for evidentiary hearing before Administrative Law Judge Richard C. Luis at 1:30 p.m. and 7:00 p.m. on September 23, 1999 at the Trimont Municipal Building in Trimont, Minnesota. The record closed on October 21, 1999.

Appearances: Charles K. Dayton, Attorney at Law, Leonard, Street and Deinard, P.A., 150 South Fifth Street, Suite 2300, Minneapolis, Minnesota 55402, appeared on behalf of Lakefield Junction LLP (Applicant, Company or Lakefield). Dwight Wagenius, Assistant Attorney General, 525 Park Street, Suite 500, St. Paul, Minnesota 55103, appeared on behalf of the Minnesota Environmental Quality Board (MEQB). Larry B. Hartman, Case Manager, and Robert Cupit, Public Advisor, 300 Centennial Building, 658 Cedar Street, St. Paul, Minnesota 55101, represented the MEQB staff.

Notice is hereby given that pursuant to Minnesota Statute § 14.61 and Minn. Rule 4405.0900, exceptions to this report, if any, by any party adversely affected must be filed within ten (10) days of the mailing date hereof with the Director of the Minnesota Environmental Quality Board, 658 Cedar Street, St. Paul, Minnesota 55155. Exceptions must be specific and stated and numbered separately. Proposed Findings of Fact, Conclusions and Order should be included, and copies thereof shall be served upon all parties.

The Minnesota Environmental Quality Board will make the final determination of the matter after the expiration of the period for filing exceptions as set forth above or after oral argument if such is requested and granted in this matter.

Further notice is hereby given that the Minnesota Environmental Quality Board may, at its own discretion, accept or reject the Administrative Law Judge's

Recommendation and that said Recommendation has no legal effect unless expressly adopted by the Board as its final Order.

### STATEMENT OF ISSUE

Should the Minnesota Environmental Quality Board issue an order exempting from the requirements of the Power Plant Siting Act the construction of a high voltage transmission line to interconnect the Lakefield Junction Generating Station with Northern States Power Company's Lakefield-Wilmarth 345 kV transmission line in Cedar Township, Martin County, Minnesota?

Based upon all the proceedings herein, the Administrative Law Judge makes the following:

# **FINDINGS OF FACT**

#### A. THE PARTIES AND PROCEDURAL HISTORY.

- 1. Lakefield Junction is a limited liability partnership formed by NRG Lakefield, Inc., and Tenaska Minnesota, Inc. (See Application for Transmission Line Exemption, "Transmission App., at Fig. 1-1, MEQB Exhibit 14.) (Knudsen Direct at 4, Applicant's Exhibit 30.)
- 2. Lakefield proposes to build, own and operate an electric generating facility to be known as the Lakefield Junction Generating Station ("the Plant"). The plant will be a nominal 550-megawatt (MW) simple-cycle combustion turbine generating plant.
- 3. The Plant is more fully described in the Findings of Fact, Conclusions of Law and Order dated May 28, 1999 (OAH Docket No. 7-2500-12107-2), recommending the issuance of a Certificate of Need by the Minnesota Public Utilities Commission (MPUC) to Lakefield for the construction of a nominal 550 megawatt simple cycle combustion turbine generating plant, which Report is incorporated herein by reference.
- 4. On August 11, 1999, Lakefield filed an application to exempt from the Power Plant Siting Act the construction of a high voltage transmission line to interconnect the Lakefield Junction Generating Station with Northern States Power Company's Lakefield-Wilmarth 345 kV transmission line in Cedar Township, Martin County, Minnesota. (MEQB Exhibit 14.)
- 5. On August 19, 1999, the MEQB ordered a contested case hearing on the exemption application, to be held concurrently with the contested case hearing on Lakefield's application for a Certificate of Site Compatibility for its large electric power generating plant. (MEQB Exhibits 16, 17.)
- 6. On August 20, 1999, Notices of the Application for Exemption were served upon MEQB Board Members and other officials required to receive notice and on the adjoining property owners, in accordance with Minn. Stat. § 116C.57, subd. 5 and Minn. Rule 4400.3900, subparts 1b and 2. (Applicant's Exhibits 37, 38.) (MEQB Exhibits 18, 19 and 20.)

7. Pursuant to the notice requirements of Minn. Stat. § 116C.57, subd. 5, the Notices of Application for Exemption were published in two legal newspapers of general circulation in Martin County, as follows:

The Fairmont Sentinel - August 25, 1999 The Truman Tribune - August 25, 1999

(Applicant's Exhibit 38.)

# B. DESCRIPTION OF THE PLANT, THE TRANSMISSION INTERCONNECTION AND THE ALTERNATIVE LOCATIONS.

- 8. The Plant is proposed to be located north and west of the City of Trimont, in Martin County in southern Minnesota. Lakefield has proposed two sites which are in close proximity to the intersection of the Northern Border Pipeline Company's ("Northern Border") high pressure natural gas pipeline and Northern States Power Company's ("NSP") 345,000-volt (345 kV) high voltage transmission line. NSP's 345 kV transmission line will provide the outlet for the electrical power generated at the plant. The proximity to this intersection is a key feature of the project, since it avoids the need for construction of a new transmission line or pipeline, except for the interconnections. (See CSC App. at 1.2 and Appendix C, (MEQB Exhibit 1) Lakefield Transmission Study and Fuel Project Strategies, pp. C-1, C-9, and EIA at 1, 4.) (Knudsen Direct at 2; Applicant's Exhibit 30.)
- 9. Lakefield has proposed a "Preferred Plant Site" and an "Alternate Plant Site." The general location of the sites in relation to Trimont and Martin County are shown in Figure 1 of the EIA. (MEQB Exhibit 21.) Both sites are located in Cedar Township, the northwestern most township in Martin County. (EIA Fig. 1) The Preferred Plant Site is located in the NE¼ of Section 19, Cedar Township, as shown in Figure 4 of the EIA. The Alternate Plant Site is located in the SW¼ of Section 20, Cedar Township, as shown in Figure 5 attached to the EIA. (Knudsen Direct at 4; Applicant's Exhibit 30.)
- 10. Locating this plant in south central Minnesota at the intersection of NSP's 345 kV line and the Northern Border Pipeline takes advantage of a location which is optimum, both electrically and geographically. (Ray Direct at 2, 3; Applicant's Exhibit 35.) The 345 kV electric transmission line near which the Lakefield Junction Project would be located is a part of NSP's regional interconnected high voltage bulk power transmission grid. It also serves as a regional reliability interconnection between the Twin Cities and the Omaha area. The primary purpose of this line is to provide NSP and neighboring utilities with back-up power in the event of a sudden loss of generation or transmission. Normally there is minimal power flowing on this line other than that which feeds the lower voltage transmission lines in southern Minnesota from the Lakefield Junction substation, located about 18 miles from the project site. (CSC App. Appendix C-2; MEQB Exhibit 1; Knudsen Direct at 5; Applicant's Exhibit 30; Ray Direct at 2,3; Applicant's Exhibit 35.)

- 11. The plant switch yard will be located adjacent to whichever site is ultimately developed for the power plant. The existing 345 kV line will be cut and additional transmission line will be added such that the path of the 345 kV line is rerouted into and out of the new plant switch yard. The re-routing will require the installation of a new dead-end structure designed to support the additional load caused by the transmission line when it makes a 90° turn into the new switch yard and for when the transmission line makes a second 90° turn after it leaves the switch yard and intersects with the path of the existing transmission line.
- 12. A second dead-end structure will be required at the switch yard. The dead-end structures will be tubular steel poles approximately 110 feet in height with crossarms (the longest being approximately 40 feet) designed to reposition the conductors (wires) from a horizontal configuration into a vertical configuration. The wires will remain in the vertical configuration until they reach the switch yard, where they are reconfigured at the second dead-end structure. For the Preferred Plant Site, the existing transmission line is approximately 1900 feet from the switch yard, requiring three intermediate support structures spaced at intervals of up to 600 feet. No road crossings are required for the Preferred Plant Route. For the Alternate Plant Site, the existing transmission line is approximately 4500 feet from the switch yard, requiring six intermediate support structures spaced at intervals of up to 600 feet. The intermediate support structures will be tubular steel poles approximately 120 feet in height with four cross-arms, the longest being approximately 40 feet. The dead end structures will be tubular steel poles approximately 40 feet. The dead end structures will be tubular steel poles approximately 40 feet. (Cullison Direct at 6-7.)
- 13. The Alternative Project Route for the transmission interconnection will require crossing Martin County Highway 103. This crossing will be overhead and will not require the setting of towers within the right-of-way. (Id.) The estimated cost of the transmission line interconnection for the Preferred Plant Site is \$550,000, and for the Alternate Plant Site is \$800,000. (Exemption App. at 9-10; Cullison Direct at 8.) Lakefield has applied for an exemption from the power plant siting process for this transmission interconnection, and for a conditional use permit and zoning setback variance from Martin County. (Cullison Direct at 7,8.)

# C. HUMAN AND ENVIRONMENTAL IMPACTS OF THE TRANSMISSION INTERCONNECTION.

14. Minn. Rule 4400.3900, subp. 7 provides:

Determination. In deciding whether to grant or deny an exemption, the Board shall consider any objections and comments that are submitted, the record of any public hearing which is held, and the information contained in the application. If the Board determines that the proposed HVTL will not have a significant human or environmental impact, the Board may exempt from the Act with any appropriate conditions the construction of the proposed facility within the proposed route.

The human and environmental impacts of the proposed transmission line are discussed below.

# Human Settlement and Visual Impact.

15. In general, the effects on human settlement are very limited. Neither site has any occupied residences. Therefore, no population displacement or adverse impacts on housing will occur as a direct result of the Plant or the transmission interconnection, construction and operation. (CSC App. at pp. 32 and 49, MEQB Exhibit 1; EIA at K.1, MEQB Exhibit 21; Idzorek Direct at 2; Applicant's Exhibit 34.)

#### Aesthetics.

16. The proposed sites are visually dominated by agricultural land uses, mostly by corn and soybean production. The Plant and transmission line will be visible from most nearby visual receptors.

# Mitigation of Visual Impact

17. The transmission line interconnection appearance will be reduced by minimizing the physical length of the interconnection, using monopole support structures, and by applying background-neutral surface finishes. (CSC App. at pp. 35, 50, and 65, MEQB Exhibit 1; HVTL Exemption Request at pg. 13, MEQB Exhibit 14; EIA at M and P.2, MEQB Exhibit 21; Idzorek Direct at 2, 3, Applicant's Exhibit 34.)

#### Noise

18. Noise impacts due to the transmission line will be minimal and are not expected to differ from the impacts already being experienced due to the existing transmission line. (CSC App. at pp. 33, 49, and 65, MEQB Exhibit 1; HVTL Exemption Request at pg. 12, MEQB Exhibit 14; EIA at J and P.1, MEQB Exhibit 21; Idzorek Direct at 3, Applicant's Exhibit 34; Brownlow Direct at 6, 7; Applicant's Exhibit 36.)

Traffic Impacts During Both Construction and Operation.

19. Traffic volumes will increase during construction due to the movement of materials and workers to the project site. Some temporary, localized traffic delays and disruption may occur for short periods during construction. Operation of the project is not expected to produce a noticeable impact because of the infrequent need for maintenance and the very small permanent work force associated with the Plant. (CSC App. at pg. 53, MEQB Exhibit 1; EIA at L, MEQB Exhibit 14; (Idzorek Direct at 3, Applicant's Exhibit 34.)

Cultural Values, Archeological and Historic Resources.

20. There are no significant cultural resources associated with either site or route. Review of the proposed Project sites by the Minnesota Historical Society State Historic Preservation Office identified no properties listed on the National or State Registers of Historical Places, and no known or suspected archaeological properties.

(CSC App. at pg. 3, MEQB Exhibit 1; HVTL Exemption Request at pg. 13, MEQB Exhibit 14; EIA at F, MEQB Exhibit 21; Idzorek Direct at 4, Applicant's Exhibit 34.) *Recreation*.

21. No significant recreational resource exists on or immediately adjacent to either of the proposed sites or routes. There should be no adverse impact on any recreational opportunities in the township or the County. (CSC App. at pp. 3, 35, and 51, MEQB Exhibit 1; HVTL Exemption Request at pg. 13, MEQB Exhibit 14; Idzorek Direct at 4, Applicant's Exhibit 34.)

Agricultural

22. The transmission interconnection will cause minimal interference with agricultural operations. From a biological standpoint, the reduction in the number of corn or soybean plants is not a significant environmental impact. An extensive amount of similar vegetation exists in the areas surrounding the proposed Project sites. (EIA at E.4, MEQB Exhibit 4; Idzorek Direct at 7, Applicant's Exhibit 34.) The transmission interconnection will not have a significant effect on the natural environment.

Effect on Rare and Unique Natural Resources

23. Based on the review conducted by the Natural Heritage and Non-game Research Program of the Minnesota Department of Natural Resources, the Project, including the transmission interconnection, is not expected to impact any rare or unique plant or animal species. (CSC App. at Appendix F, MEQB Exhibit 1; Idzorek at 7, Applicant's Exhibit 34; EIA at 37.)

Adverse Human, Natural and Environmental Effects Which Cannot be Avoided as a Result of Construction and Operation of the Plant

24. There are no significant adverse human, natural and environmental effects from the Project or the proposed transmission interconnection at either site or route. (Idzorek Direct at 11, Applicant's Exhibit 34; EIA at 32-67.)

Based upon the above Findings of Fact, the Administrative Law Judge makes the following:

#### CONCLUSIONS

- 1. Any of the foregoing Findings more properly designated as Conclusions are hereby adopted as such.
- 2. The Administrative Law Judge and the Minnesota Environmental Quality Board have jurisdiction over the subject matter of the hearing pursuant to Minn. Stat. §§ 14.50 and 116C.06 and Minn. Rule 4400.3900.
- 3. All relevant substantive and procedural requirements of law and rule have been fulfilled prerequisite to the issuance of an Order exempting from the Act the construction of a HVTL within the proposed route.

4. The route proposed by the Applicant for the construction of a high voltage transmission line to interconnect the Lakefield Junction Generating Station with NSP's Lakefield-Wilmarth 345 kV transmission line should be approved, exempting the necessary interconnections between the large electrical power generating plant in the NE ¼ of Section 19, Cedar Township, Martin County, Minnesota with the existing Lakefield-Wilmarth 345 kV transmission line.

Based upon the foregoing Conclusions, the Administrative Law Judge respectfully makes the following:

## RECOMMENDATION

That the MEQB issue an Order EXEMPTING from the Power Plant Siting Act the construction of a high voltage transmission line to interconnect the Lakefield Junction Generating Station (to be located in the NE ¼ of Section 19, Cedar Township, Martin County, Minnesota) with NSP's Lakefield-Wilmarth 345 kV transmission line in Cedar Township, Martin County, Minnesota.

Dated this 29<sup>th</sup> day of October, 1999

	/s/ Richard C.	
Luis		Richard C. Luis
	Administrative Law Judge	

Reported: Julie Rixe, Janet Shaddix and Associates Transcripts Prepared.

# **NOTICE**

Under Minn. Stat. § 14.62, subd. 1, the agency is required to serve its final decision upon each party and the Administrative Law Judge by first class mail or as otherwise provided by law.

#### MEMORANDUM

The Recommendation to exempt the transmission line interconnection to be constructed between the plant and the existing Wilmarth – Lakefield line is limited to the confines of the NE ¼ of Section 19, consistent with the Recommendation in the companion docket to approve the Applicant's "Preferred" site over the "Alternate" site in the SW ¼ of Section 20. That issue is discussed in greater detail in the Findings of Fact, Conclusions and Recommendation issued today in OAH Docket No. 7-2901-12493-2 (MEQB Docket No. LJ-LEPGP-1-99).

R.C.L.